



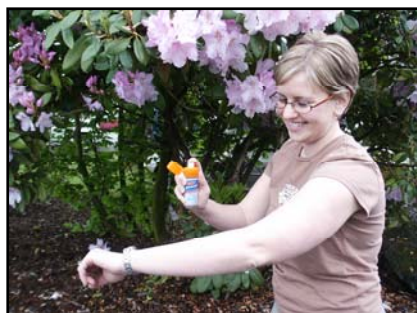
West Nile Virus Newsletter

For the third year, the Department of Health (DOH) is using this electronic newsletter as a regular communication tool to help keep its partners informed about West Nile virus (WNV). The newsletter will be provided every two weeks throughout the warmer peaks of the mosquito season and less frequently during the colder, non-peak mosquito periods.

New repellent guidance for upcoming mosquito season

Centers for Disease Control and Prevention, Press Release, April 28, 2005

Americans have more options than ever to use in protecting themselves from mosquito bites. Today, the Centers for Disease Control and Prevention (CDC) released new guidance about effective mosquito repellents available in the United States. The updated guidance includes addition of two active ingredients - picaridin and oil of lemon eucalyptus - which have been shown to offer long-lasting protection against mosquito bites. Repellents containing DEET continue to be a highly effective repellent option and are also included in the CDC guidelines.



Picaridin, also known as KBR 3023, is an ingredient found in many mosquito repellents used in Europe, Australia, Latin America and Asia for some time. Evidence indicates that it works very well, often comparable with DEET products of similar concentration. One product, containing 7 percent picaridin, is being distributed in the United States for the first time this year. The other repellent is oil of lemon eucalyptus (also known as p-menthane 3,8-diol or PMD), a plant-based mosquito repellent that provided protection time similar to low

concentration DEET products in two recent studies. It is available in a variety of formulations throughout the United States.

"We're very excited that the number of options people have to protect themselves from mosquitoes and therefore West Nile Virus has increased," said CDC Director Julie L. Gerberding. "Products containing DEET, picaridin and oil of lemon eucalyptus are all excellent choices. The important thing is that they remember to protect themselves from mosquito bites when they're going to be outside. We want people to enjoy their spring and summer free of West Nile Virus."

Mosquito season has already begun in some parts of the country. With mosquitoes comes the risk of West Nile Virus infection and other infections spread by mosquitoes. Just one bite can lead to an infection that could cause serious illness or even death. While people over 50 are more likely to become seriously ill if infected with WNV, people of any age can become mildly to seriously ill. Most people who contract West Nile Virus do not show any symptoms. However, about 20 percent of people experience symptoms such as fever, headache, nausea and vomiting and an estimated 1 in 150 people infected with WNV will develop severe illness. The severe symptoms can include high fever, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss and paralysis.

DEET, picaridin and oil of lemon eucalyptus are all registered with the U.S. Environmental Protection Agency, which regulates these products. Repellents registered with EPA have been evaluated for both safety and efficacy when used according to label instructions.

CDC recommends that people use repellent anytime they go outside, especially during prime mosquito biting hours, between dusk and dawn. People should follow the label instructions, and if they start getting bitten re-apply repellent.

CDC works with state and local health departments, federal and other government agencies, as well as private industry, to prepare for and prevent new cases of West Nile virus infection. CDC coordinates ArboNet, a nation-wide electronic database that gathers information about West Nile virus in humans and animals, in order to guide prevention and response activities. To learn more about how to protect yourself and your family from West Nile Virus, please visit www.cdc.gov/westnile. More information on the guidance is available at <http://www.cdc.gov/ncidod/dvbid/westnile/RepellentUpdates.htm>.

You can help detect WNV...but wear repellent and gloves!

Snohomish Health District, News Release, May 5, 2005

SNOHOMISH COUNTY -- "Making do" with a reduced West Nile virus (WNV) surveillance program, Snohomish Health District hopes residents of the county will report dead birds and bring them in for testing when asked, beginning May 9. The local public health agency will continue to monitor mosquitoes in Marysville, Everett, Lake Stevens, and Snohomish.

"The most visible difference in our program is that people will need to bring us the dead birds for testing when they find them, instead of our going out to collect them," said Mike Young, Senior Environmental Health Specialist. If you find a dead bird that didn't die from obvious injury, note the location and report it to the Health District at 425.339.8720, or 425.339.5250.

"Not all dead birds qualify for testing – so please do not bring dead birds to us unless we ask you to do so," said Young. With a go-ahead from the public health agency, bring the bird to 3020 Rucker Avenue, Suite 104, Everett.

Crows, ravens, and blue jays are particularly susceptible to WNV and often die from it. Mosquito bites transfer the virus from infected birds to other animals and humans. Most infected people show no symptoms of viral illness. So far no-one has acquired WNV in Washington state, although a few horses and birds tested positive in 2002. A few Washington residents have

become infected while traveling outside of Washington state. Snohomish Health District received negative results on 203 birds tested in 2003 and 89 birds for testing in 2004.

At the direction of the Board of Health, the Health District scaled back its mosquito mapping and surveillance activities and reassigned some WNV staff to inspect public swimming pools. When WNV is detected in Snohomish County, the Health District will request increased WNV funding from the Board.

The complete news release is available at <http://www.snohd.org/News2/index.htm>.

West Nile risk puts chickens on the lookout

By Sarah Hunsberger, The Oregonian, May 3, 2005

OREGON CITY -- One after another, the white leghorns reported for duty.

Amid a fluttering of feathers, a Clackamas County mosquito control official deposited the chickens into a wood-and-wire coop south of Oregon City. Their summer job: relax, eat, lay eggs, attract mosquitoes.

Across Oregon and the country, "sentinel chickens" are being deployed this spring as a warning system for West Nile virus, which mosquitoes transmit from wild birds to horses and to humans.

Five people in Oregon contracted the virus last year. No human cases have been reported in the state this year, but that is expected to change with the arrival of mosquito season.

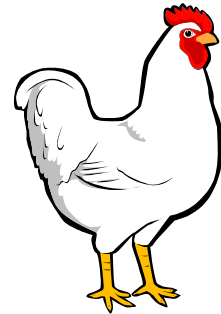
Although most people who contract the virus don't get sick, about 20 percent suffer flulike symptoms, and a small portion die, usually those already in fragile health. Nationwide, about 16,000 human cases of West Nile have been confirmed since 1999, when the virus was first detected in the United States, with about 620 fatalities, said Emilio DeBess, Oregon's public health veterinarian.

Chickens are good barometers of the disease because they don't get sick from the virus, and they can't infect one another, mosquitoes or anything else. Their eggs -- or the chickens themselves -- may be eaten with no risk of disease.

The birds develop antibodies, telltale immune system markers, if bitten by an infected mosquito. That makes them uniquely suited for the work.

Called sentinels because they are stationed in a single location, the chickens allow public health officials to pinpoint the exact spot where the disease strikes. Clackamas County will test its chickens for the antibodies every two weeks.

Testing mosquitoes and wild birds such as crows also can warn of the disease, but those tests don't indicate where the infection occurred.



"I think that the more different types of information you can collect, the better a comprehensive picture you're going to get," said Chris Wirth, who manages Multnomah County's mosquito control program.

Nationally, about a dozen states use sentinel chickens, said Nicholas Komar, a research biologist with the U.S. Centers for Disease Control and Prevention.

The complete news article can be read at

http://www.oregonlive.com/search/index.ssf?/base/metro_south_news/1115114863251010.xml?oregonian?sn&coll=7.

Promising new West Nile therapy cures disease in mice

National Institutes of Health, National Institute of Allergy and Infectious Diseases, News Release, April 24, 2005

West Nile virus alarmed Americans when it made its first U.S. appearance in New York City in 1999. It has since spread from coast to coast, sickened more than 16,000 Americans and killed more than 600. As the virus spread, medical investigators hastened research to develop an effective vaccine or therapy. None currently exist, but a newly published paper by researchers at Washington University in St. Louis points to a promising treatment. This research, published today online by *Nature Medicine*, was funded in part by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health.

The research team developed an infection-fighting antibody that mimics one produced by people whose immune systems successfully fend off the West Nile virus. The researchers tested their antibody in mice and say its success warrants further development and testing in people with West Nile disease.

"West Nile virus has emerged in the United States as a regular seasonal threat, particularly for people over 50. We currently do not have a proven therapy for people with serious West Nile disease, so we will continue to aggressively pursue all promising leads for an effective treatment," says Anthony S. Fauci, M.D., director of NIAID.

Scientists do not know why some people infected with West Nile virus have no symptoms or a mild flu-like illness, while in others the virus invades the central nervous system and causes paralysis or coma. "We could give this antibody to mice as long as five days after infection, when West Nile virus had entered the brain, and it could still cure them," says Washington University senior investigator Michael Diamond, M.D., Ph.D., who headed the research team, which is supported in part by the NIAID-funded Midwest Regional Center of Excellence for Biodefense and Emerging Infectious Diseases. "It also completely protected the mice against death."

The complete news release is available at <http://www.nih.gov/news/pr/apr2005/niid-24.htm>.

Community Comments

Let us hear your comments on this newsletter, your needs, or things you would like to see, by sending them to Maryanne Guichard, 360.236.3391 or maryanne.guichard@doh.wa.gov.

WNV Web Resources

Washington State Department of Health www.doh.wa.gov/wnv
Center for Disease Control and Prevention www.cdc.gov/ncidod/dvbid/westnile/
Cornell University, Environmental Risk Analysis Program environmentalrisk.cornell.edu/WNV/
Washington State University Cooperative Extension wnv.wsu.edu/
Washington State Department of Agriculture
agr.wa.gov/FoodAnimal/AnimalHealth/Diseases/WestNileVirus/default.htm

Article Submission and Subscribing to Newsletter

We are interested in receiving articles for future publications of the WNV Newsletter. Please submit articles and subscription requests to Ben Hamilton, benjamin.hamilton@doh.wa.gov.

DOH Contact List for West Nile Virus

General Public Toll-Free Information Line 1.866.78VIRUS

Publications: Brochures/Flyers/Response Plan/Fact Sheets

Cyndi Free, 360-236-3384 or cyndi.free@doh.wa.gov

Surveillance: Mosquito

Jo Marie Brauner, 360.236.3064 or jomarie.brauner@doh.wa.gov

Animal Surveillance: Dead bird and horse surveillance, case reporting, and laboratory assistance, as well as general WNV response

Tom Gibbs, 360.236.3060 or tom.gibbs@doh.wa.gov

Aquatic Mosquito Control National Pollutant Discharge Elimination System (NPDES)

General Permit: Training, technical assistance

Ben Hamilton, 360.236.3364 or benjamin.hamilton@doh.wa.gov

WNV in Humans: Clinical information, case reporting, and laboratory testing

Call your local health jurisdiction or DOH Communicable Disease Epidemiology, (206) 418-5500 or (877) 539-4344.

Assistance with news releases and media response

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